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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,017	03/30/2004	Bunji Moriya	111430.01	2788
25944	7590	03/22/2006	EXAMINER	
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			ARBES, CARL J	
			ART UNIT	PAPER NUMBER
			3729	

DATE MAILED: 03/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

<b>Office Action Summary</b>	<b>Application No.</b> 10/812,017	<b>Applicant(s)</b> MORIYA ET AL.	
	<b>Examiner</b> C. J. Arbes	<b>Art Unit</b> 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 30 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 10/011,291.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>herein</u> | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3729

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 9-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The Patent Office cannot determine the metes and bounds of this claim without guessing and therefore this claim and each of the claims dependent thereon is properly rejected under the Statute provided *supra*. For example what does the language... predetermining a relationship (in said claim 9) mean? What is included in this language? What is excluded? What does the language... a change of characteristics of a ... include? What does this language exclude? Moreover what is a ...processing condition... as intended by Applicants? What is a....relationship... as intended by Applicants?

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bureau et al (Pat No 6,492,194 B1) hereinafter Bureau et al.

Bureau et al teach a method for packaging electronic components wherein an electronic component or equipment is mounted with its active side having electrical contacts which

Art Unit: 3729

are electrically connected and mechanically bonded to a conductor on a substrate. A deformable film is provided and air from the volume which is enclosed by the deformable resin film is aspirated or removed therefrom through a hole in the substrate. Bureau et al teach that the film can be thermoplastic and can have conductive particles therein (Cf. bottom of Col 3 and top of Col 4). Moreover the prior art teaches that the covering operation can be carried out in an autoclave which is to say that heat and pressure can be used to perform the operation. As is seen quite clearly in at least Figure 2a and 2b the holes which are used to eliminate the trapped air within the space which is enclosed by the deformable film are spaced proximate to that position where the deformable film touches the substrate. If indeed the prior art does not explicitly teach that the resin film is fluidized and thereafter hardens (which it is believes that the prior art does teach) it would have been obvious that with the temperature and pressure which is used in the autoclaving step that indeed the film would fluidize and thereafter harden. These are common attributes of many thermoplastic films. As further applied to claim 5 it is held to be mere design choice to locate the aspiration hole/s within a center portion of the mount substrate inasmuch as Applicants have provided no specific problem which they have solved nor is there any particular purpose therefore.

Alternatively the position of the holes within the center portion of the mount surface given the prior art inasmuch as a POSITA without undue experimentation would provide the holes at such location. As further applied to claim 6 it is clear from viewing at least Figure 2 b that the prior art does teach the limitation drawn in said claim 6. As applied to claim 9 (as understood) is rejected inasmuch as it is within the ordinary of a POSITA


Art Unit: 3729

to use the proper temperatures, proper chemical or hardening accelerators, proper pressures, proper ingredients and the like in order to insure that a proper and non-defective electronic device is made.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. J. Arbes whose telephone number is 571-272-4563. The examiner can normally be reached on M, T, R and F from 8 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, P. Vo, can be reached on 571-272-4563. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
C. J. Arbes  
Primary Examiner  
Art Unit 3729